



STATE OF MARYLAND

# DMMH

Maryland Department of Health and Mental Hygiene  
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**May 08, 2009**

## Public Health & Emergency Preparedness Bulletin: # 2009:17 Reporting for the week ending 05/02/09 (MMWR Week #17)

### CURRENT HOMELAND SECURITY THREAT LEVELS

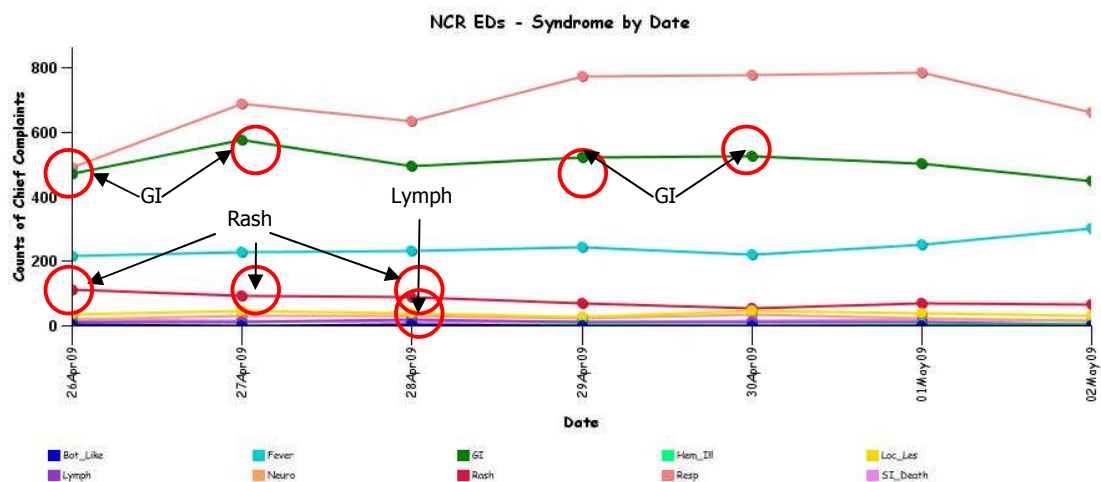
**National:** Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
**Maryland:** Yellow (ELEVATED)

### SYNDROMIC SURVEILLANCE REPORTS

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

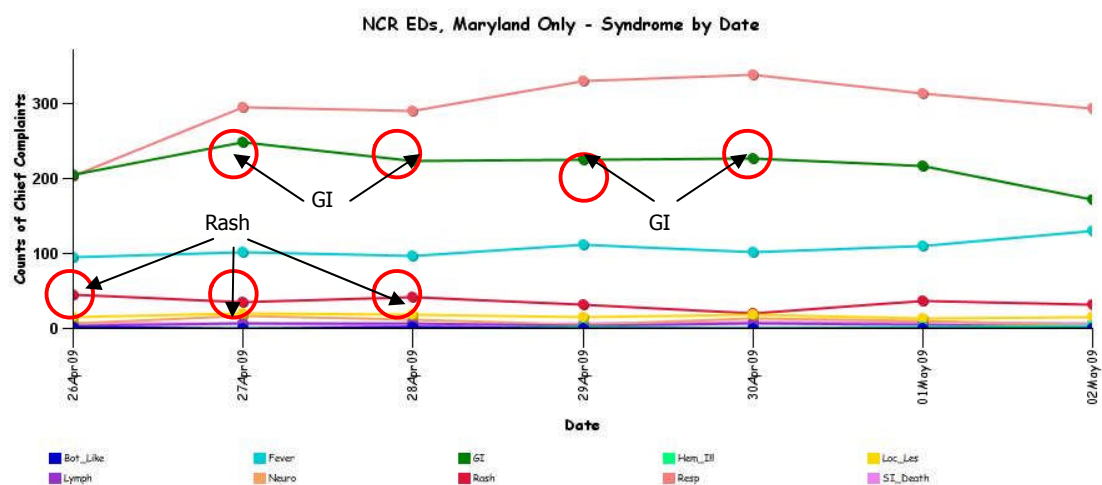
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



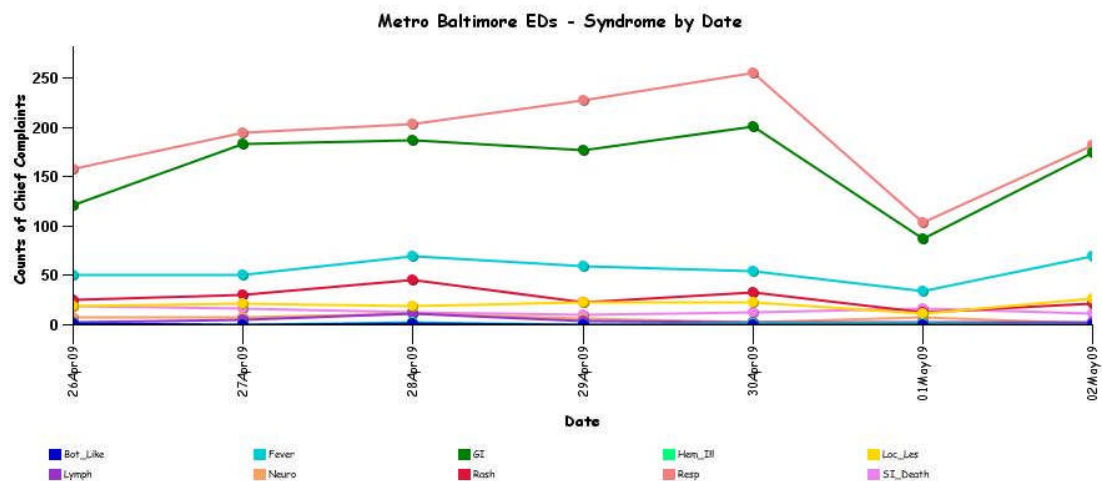
\* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

**\*\*Additional Red Alerts:** Fever on Apr 26, Apr 27, Apr 28, Apr 29, Apr 30, May 1, May 2  
Respiratory on Apr 27, Apr 28, Apr 29, Apr 30, May 1, May 2



\* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

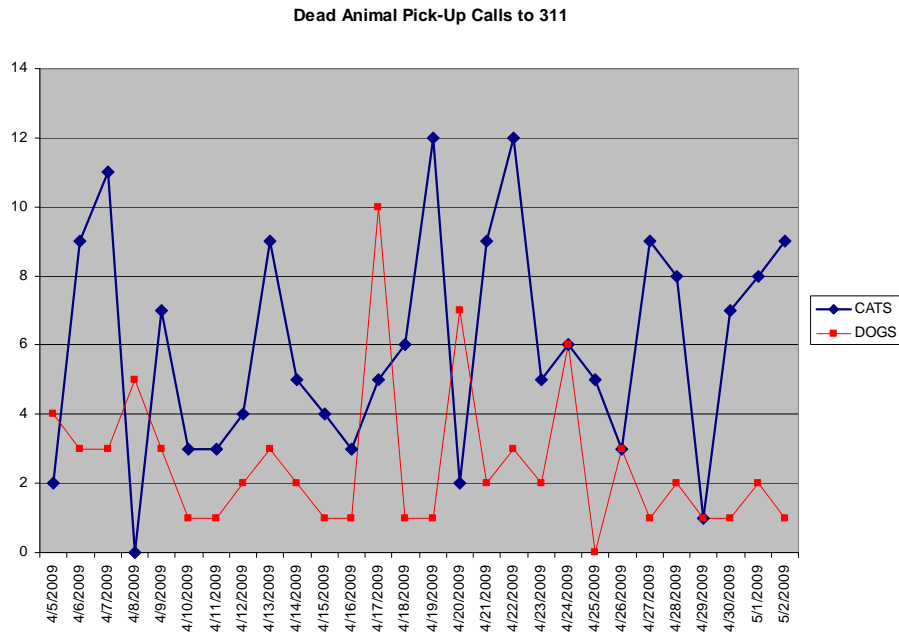
**\*\*Additional Red Alerts:** Fever on Apr 26, Apr 27, Apr 28, Apr 29, Apr 30, May 1, May 2  
Respiratory on Apr 27, Apr 28, Apr 29, Apr 30, May 1, May 2



\* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

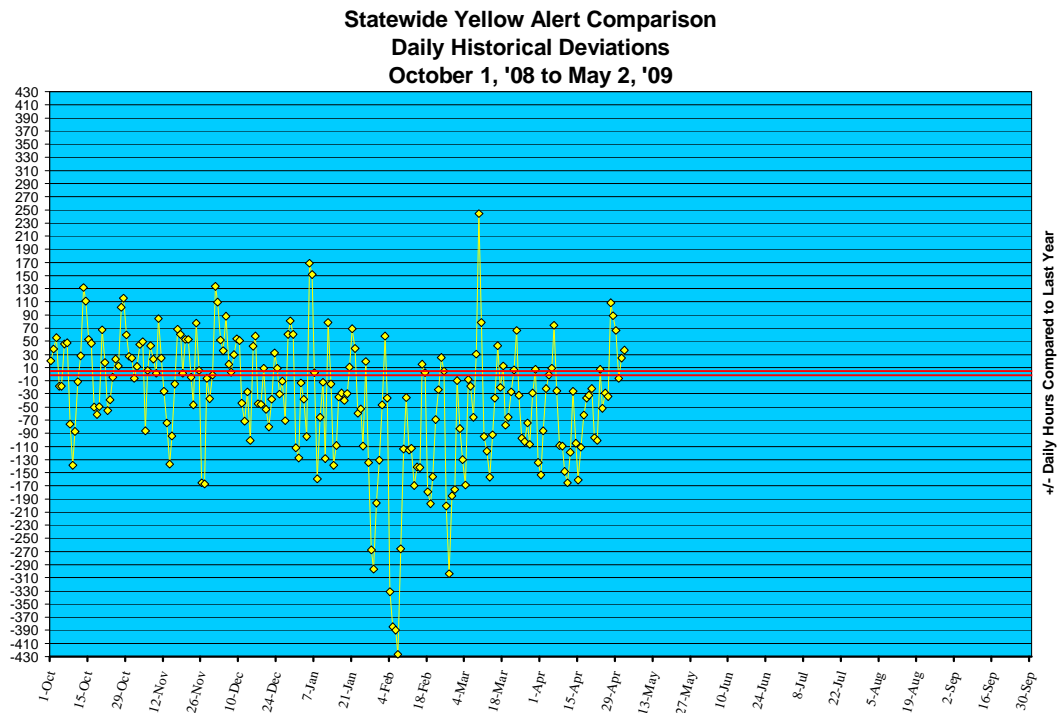
**\*\* Red Alerts are not indicated on this graph.**

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



#### **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/08.



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to BT for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in March 2009 did not identify any cases of possible terrorism events.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (Apr 26 – May 2, 2009):	07	0
Prior week (Apr 19 – Apr 25,, 2009):	14	0
Week#17, 2008 (Apr 20 - 26, 2008):	17	0

### **OUTBREAKS: 3 outbreaks were reported to DHMH during MMWR Week 17 (April 26- May 2, 2009):**

#### 2 Gastroenteritis outbreaks

- 1 outbreak of GASTROENTERITIS associated with a Nursing Home
- 1 outbreak of GASTROENTERITIS associated with a Festival

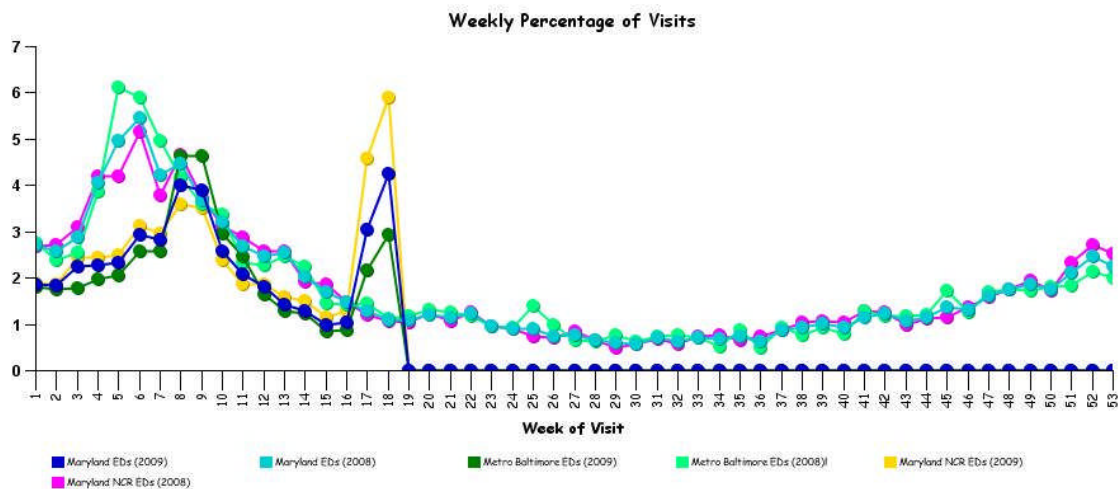
#### 1 Rash illness outbreak

- 1 outbreak of CHICKENPOX associated with a School

**MARYLAND SEASONAL FLU STATUS:** Seasonal influenza activity in Maryland for last week, Week 16, was SPORADIC. During Week 16 (last week), 28 confirmed cases of seasonal influenza were reported to DHMH.

## **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:**

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO Pandemic Influenza Phase:** Phase 5: Characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
<http://bioterrorism.dhmm.state.md.us/flu.htm>

**WHO update:** As of April 23, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 421, of which 257 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

**AVIAN INFLUENZA, HUMAN, SUSPECTED (Indonesia):** 27 Apr 2009, Bird flu in Riau continues to haunt local residents after the death of a young boy last month [March 2009]. Arifin Achmad General Hospital in Pekanbaru is now treating a new patient who has symptoms of the virus. Head of the hospital's bird flu prevention team Azizman Saad said the 32 year old patient had been suffering from high fever and breathing problems for the past week. The patient, a resident of Palalalwan regency, was admitted to hospital on Sunday 26 Apr 2009, Azizman said. "He is still suspected of being infected with the virus and is currently being treated in an isolation room," he said. To get information on his illness, the patient's blood sample has been sent to the health research agency at the Health Ministry in Jakarta, he said. "We will know the results tomorrow," Azizman said.

**AVIAN INFLUENZA, HUMAN, SUSPECTED (Indonesia):** 26 Apr 2009, A 31 year old bird flu patient died on Wed 22 Apr 2009 at Arifin Achmad hospital, Pekanbaru. He passed away after being treated intensively at a special isolation room for bird flu suspected patients. According to Azizman Saad - head of Bird Flu Control Team Arifin Achmad Hospital - the death of the patient was due to sudden lung failure. Up to the present moment, Arifin Achmad hospital is still waiting for blood and throat swab samples test results. This fatality is the 2nd bird flu suspect case recorded in Arifin Achmad hospital within the latest month [April 2009]. Previously, a 2.5 year old toddler died on 26 Mar 2009. Further blood tests showed a bird flu positive result.

**AVIAN INFLUENZA, HUMAN (Viet Nam):** 26 Apr 2009, A 23 year old woman from Thanh Hoa Province died of bird flu on Wed 22 Apr 2009, Viet Nam's 4th fatality from the disease this year, an official from the Health Ministry confirmed on Friday 24 Apr 2009. Nguyen Huy Nga, head of the ministry's Bureau of Preventive Health and Environment, said the victim was from Quan Hoa District in the central province. Though the bureau confirmed the victim had been infected with the H5N1 avian influenza virus, no birds had been affected by the disease in the area recently. The woman was admitted to Quan Hoa General Hospital last Thurs 16 Apr 2009 before being transferred to Thanh Hoa General Hospital in critical condition on Tuesday 21 Apr 2009. She was suffering from pleural and pericardial effusion and kidney failure at the time. A team from the National Institute of Hygiene and Epidemiology and local health authorities failed to find any trace of bird flu in Thien Phu Commune, where the woman lived. All 4 human bird flu cases in Viet Nam this year [2009] have proved fatal.

## **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA A (H1N1) VIRUS (Worldwide):** 2 May 2009, The situation continues to evolve. As of 18:00 GMT+1, 2 May 2009, 16 countries have officially reported 658 cases of influenza A (H1N1) infection. Mexico has reported 397 confirmed human cases of infection, including 16 deaths. The higher number of cases from Mexico in the past 48 hours reflects ongoing testing of previously collected specimens. The United States government has reported 160 laboratory confirmed human cases, including one death. The following countries have reported laboratory confirmed cases with no deaths - Austria (1), Canada (51), China, Hong Kong Special Administrative Region (1), Costa Rica (1), Denmark (1), France (2), Germany (6), Israel (3), Netherlands (1), New Zealand (4), Republic of Korea (1), Spain (13), Switzerland (1) and the United Kingdom (15). Further information on the situation will be available on the WHO website on a regular basis. The WHO advises no restriction of regular travel or closure of borders. It is considered prudent for people who are ill to delay international travel and for people developing symptoms following international travel to seek medical attention, in line with guidance from national authorities. There is also no risk of infection from this virus from consumption of well-cooked pork and pork products. Individuals are advised to wash hands thoroughly with soap and water on a regular basis and should seek medical attention if they develop any symptoms of influenza-like illness.

**INFLUENZA A (H1N1), ANIMAL HEALTH, INFECTED SWINE (Canada):** 2 May 2009, H1N1 influenza virus has infected some pigs in Alberta, federal officials confirmed Saturday. "It is highly probable that the pigs were exposed to the virus from a Canadian who had recently returned from Mexico and had been exhibiting flu-like symptoms," a news release from the Canadian Food Inspection Agency said. All of the pigs are recovering or have recovered. The herd affected has been placed under quarantine, said Dr. Brian Evans, an official with the Canadian Food Inspection Agency. It's common to see influenza in pigs and human transmission to pigs is known to occur, Evans said. Normally detecting influenza in pigs would not generate a response from food safety officials, but with an international flu outbreak, the

current circumstances are different, Dr. Evans told a news conference in Ottawa. The chance that these pigs could transfer virus to a person is remote," Dr. Evans said. The H1N1 virus, which is made up of swine flu genes, is believed to have jumped to humans some time back and has been passing person to person. The World Health Organization has insisted there is no evidence that pigs are passing the virus to humans, or that eating pork products poses an infection risk. Genetic testing shows the pigs in Alberta were infected with the same virus responsible for cases in California, Mexico and other countries around the world. Herman Simons, a spokesman for Alberta Pork, a producer's group, said the main worry is the possible effect of the discovery on exports. "That's our big concern," Mr. Simons said. "The biggest concern is it may impact exports of live animals into the U.S." Earlier this week, the World Health Organization dropped the term "swine flu" - a nickname that angered pork producers and led to a drop in pork sales - in favor of its scientific name: "H1N1 influenza A." Meanwhile, Canada's swine flu caseload swelled Saturday to 85 cases as health officials confirmed a host of new cases in Nova Scotia, Alberta and Quebec.

**INFLUENZA A (H1N1), CHANGE IN PANDEMIC ALERT PHASE (Worldwide):** 30 Apr 2009, International Health Regulations (IHR): At the request of the Director-General (DG) of WHO, the IHR Emergency Committee has been summoned and is advising the DG on the event. On its 1st day of deliberation, 25 Apr 2009, it concluded that the present event constitutes a Public Health Emergency of International Concern. The 2nd meeting of Emergency Committee was held on 27 Apr 2009. The Committee advised about the need of raising the alert level, and accordingly the DG has raised the pandemic alert level from 3 to 4. On 29 Apr 2009, the DG decided to elevate the pandemic alert to Phase 5. In order to come to this urgent decision, the DG considered epidemiological information from the most affected countries, as well as the result of the scientific meeting held that same day. The latter indicated existence of sustained outbreaks of swine influenza A H1N1 at the community level in more countries within the region. The decision to increase the pandemic level of the alert should permit Member States to provide the required leadership and coordination as well as to consider the possibility of executing their contingency plans. The DG recommends not closing borders or restricting travel. However, it is prudent for people who are sick to delay travel. Moreover, returning travelers who have become sick should seek medical attention in line with guidance from national authorities. Production of seasonal vaccine should continue, but at the same time, WHO is making all the efforts to facilitate the process of development of a vaccine against swine influenza A H1N1. The committee will continue to advise the DG on the basis of the available information.

**INFLUENZA A (H1N1) VIRUS, FIRST FATALITY (USA):** 29 Apr 2009, The Texas baby who became the 1st confirmed US death from the new H1N1 swine flu had recently traveled to Mexico, a US government source said on Wednesday 29 Apr 2009. The US Centers for Disease Control and Prevention had earlier confirmed the 23-month-old child as the 1st swine flu death reported outside Mexico, the country hardest hit by the influenza outbreak. US officials have confirmed 65 cases of swine flu, most of them mild but with 5 hospitalizations in California and Texas.

**INFLUENZA A (H1N1) VIRUS (USA):** 27 Apr 2009, CDC activated its Emergency Operations Center to coordinate the agency's response to this emerging health threat and yesterday [26 Apr 2009] the Secretary of the Department Homeland Security, Janet Napolitano, declared a public health emergency in the United States. This will allow funds to be released to support the public health response. CDC's goals during this public health emergency are to reduce transmission and illness severity, and provide information to assist health care providers, public health officials and the public in addressing the challenges posed by this newly identified influenza virus. To this end, CDC has issued a number of interim guidance documents in the past 24 hours. In addition, CDC's Division of the Strategic National Stockpile (SNS) is releasing one-quarter of its antiviral drugs, personal protective equipment, and respiratory protection devices to help states respond to the outbreak. Laboratory testing has found the swine influenza A (H1N1) virus susceptible to the prescription antiviral drugs oseltamivir and zanamivir. This is a rapidly evolving situation and CDC will provide updated guidance and new information as it becomes available.

**INFLUENZA A (H1N1) VIRUS (Mexico):** 26 Apr 2009, Mexico's president assumed new powers Saturday to isolate people infected with a deadly swine flu strain as authorities struggled to contain an outbreak that world health officials warned could become a global epidemic. New cases of swine flu were confirmed in Kansas and California and suspected in New York City. But officials said they didn't know whether the New York cases were the strain that now has killed up to 81 people in Mexico and likely sickened 1324 since 13 Apr 2009, according to figures updated late Saturday 25 Apr 2009 by Mexico's health secretary. Tests have confirmed swine flu as the cause of death in 20 of the cases. Mexican soldiers and health workers patrolled airports and bus stations as they tried to corral people who may be infected with the swine flu, as it became clearer that the government may have been slow to respond to the outbreak in March and early April. The World Health Organization on Saturday 25 Apr 2009 asked countries around the world to step up reporting and surveillance of the disease and implement a coordinated response to contain it. Two dozen new suspected cases were reported in Mexico City alone, where authorities suspended schools and all public events until further notice. More than 500 events, including concerts and sports games, were canceled in the metropolis of 20 million. Mexican authorities ordered schools closed in the capital and the states of Mexico and San Luis Potosi until 6 May 2009, and the Roman Catholic Church announced the cancellation of Sunday masses in the capital. The Mexican government issued a decree authorizing President Felipe Calderon to invoke special powers letting the Health Department isolate patients and inspect homes, incoming travelers and baggage. But officials said it was designed to free health workers from possible legal reprisals and to speed disease control efforts. A team from the Centers for Disease Control had arrived in Mexico to help set up detection testing for the swine flu strain, something Mexico previously lacked. Mexican health authorities started noticing a threefold spike in flu cases in late March and early April, but they thought it was a late rebound in the December-February flu season. Testing at domestic labs did not alert doctors to the new strain, and Cordova acknowledged Mexican labs lacked the necessary profiling data to detect the previously unknown strain. The 1st death occurred in southern Oaxaca state on 13 Apr 2009, but Mexico didn't send the 1st of 14 mucous samples to CDC until 18 Apr 2009, around the same time it dispatched health teams to hospitals looking for patients with severe flu or

pneumonia-like symptoms. Those teams noticed something strange: the flu was killing people aged 20 to 40. Flu victims are usually either infants or the elderly. A "seed stock" genetically matched to the new swine flu virus has been created by CDC, said Dr Richard Besser, the agency's acting director. If the government decides vaccine production is necessary, manufacturers would need that stock to get started.

#### **Resources:**

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmh.maryland.gov/swineflu/>

#### **NATIONAL DISEASE REPORTS:**

**BOTULISM, EQUINE (Wyoming):** 2 May 2009, Metro Animal Control is investigating the sudden deaths of 10 horses on a property west of Casper, Wyoming, in April 2009, its manager said Thurs 30 Apr 2009. Metro learned of the deaths on 11 April 2009 from the veterinarian of the horses' owner, Rick Sulzen said. A total of 6 horses were already dead by that date and the other 4, which were lethargic and unable to stand, died within the next 24 hours, he said. The causes and manners of their deaths are unknown, Sulzen said. "We didn't see anything out of the ordinary." The horses appeared well cared for, investigators did not find any apparent environmental problems, and there was no evidence of foul play, he said. The horses drank from Casper Creek, which has selenium in the water, Sulzen said. But other animals drink from the stream and don't have problems, he said. Metro officials sent specimens of the horses to the state veterinary laboratory in Laramie, and to a lab at Colorado State University in Fort Collins, Colo., he said. Metro is still waiting for the results of the necropsies from the labs, Sulzen said. State Veterinarian Dr. Walter Cook learned of the deaths by e-mails sent from local veterinarians. Although the tests on the specimens are not finished, a tentative cause of the deaths may have been botulism, Cook said. Botulism is a form of food poisoning caused by the bacterium botulinum, which secretes a virulent nerve toxin called botulin. It is not infectious, Cook said. Spoiled food often is the culprit for animals and humans, he said. With livestock, botulism can occur when a dead animal is trapped in a hay bale and the bacteria grow because of the lack of oxygen in the compressed feed, he said. When consumed, the contaminated food causes paralysis and almost always death, Cook said. He urged animal caretakers to contact a veterinarian if an animal becomes ill, and urged them to constantly monitor the food sources. Because the horse deaths apparently were not caused by an infectious disease, the state veterinarian's office rarely hears of deaths from botulism and in his experience those occur every 4 to years, he said. In this case, the near-sudden death of 10 horses is probably unique, Cook said. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

#### **INTERNATIONAL DISEASE REPORTS:**

**CHIKUNGUNYA (Thailand):** 29 Apr 2009, A total of 6379 people caught the insect-borne chikungunya virus since the beginning of this year, a senior public health official said 29 Apr 2009. Doctor Sanphet Ritthiraksa, a specialist on preventive medicine of the Songkhla Public Health Office, said the 6379 chikungunya patients were detected from 1 Jan-27 Apr 2009. Their number breakdowns to 3007 patients in Sabayoi district, 1387 patients in Sadao district, 328 patients in Thepha district, and 314 patients in Nathawee district. He admitted that it was difficult to control the outbreak because of mosquitoes in rubber plantations and frequent rains in the province. (Emerging Infectious Disease are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, BOVINE (Argentina):** 27 Apr 2009, On 19 Apr 2009, an outbreak of anthrax was reported in a herd of 20 mixed British breed cattle, of which 3 had died suddenly with blood extravasation from their mouths. Bacillus anthracis was recovered by culture from a long bone of one animal. Human access to the carcasses was strictly limited, and they were disposed of using the standard "Tarpado Controlado" technique. There has been a severe drought through the spring and summer into the autumn, with above normal temperatures throughout the region. The farm is located in Navarro county in the province of Buenos Aires. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**UNDIAGNOSED RESPIRATORY ILLNESS, STUDENTS (China):** 27 Apr 2009, Over 100 students at a primary school in Liquan County have caught colds and the school has been closed for 4 days. Education, public health, and disease control agencies are jointly investigating. On 24 Apr 2009, the main gate at "August First" Primary School in Shide Village in Liquan County was locked. A few kids were playing outside the main gate. A 3rd grade student said that their school has been closed since 23 Apr 2009 because so many students developed fever and colds. School administrators said the school has a total of 300 students. Around 20 Apr 2009, students began developing fever, cough, and vomiting. Since then, the number of symptomatic students has been increasing and there are now 116 students taken ill. To prevent cross-infection among students, the school was shut down for 4 days. Students are now being treated at Liquan County People's Hospital and Shide Village Health Center. Analysis by Shide Village Health Center has confirmed that the cause of illness is an upper respiratory tract infection, classified as a cold [alternative translation is "influenza"]. Liquan County

education, public health, and disease control agencies are now investigating the cause of illness. (Emerging Infectious Disease are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmd.state.md.us/>

**MMWR Dispatch: April 30, 2009 / 58 (Dispatch); 1-3.**

**Outbreak of Swine-Origin Influenza A (H1N1) Virus Infection - Mexico, March-April 2009**

This report describes the initial and ongoing investigation of the S-OIV outbreak in Mexico.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0430a2.htm>

**MMWR Dispatch: April 30, 2009 / 58(Dispatch); 1-3.**

**Swine-Origin Influenza A (H1N1) Virus Infections in a School - New York City, April 2009**

This report describes the initial outbreak investigation by the NYC Department of Health and Mental Hygiene (DOHMH) and provides preliminary details about the patients.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0430a1.htm>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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